

Application No. 09/961,246

Attorney's Docket No. 0119-118

LISTING OF CLAIMS

This Listing of Claims replaces all prior versions and listings of the claims in this application.

1. (currently amended) In a network, a Bluetooth network access point comprising:

a first transceiver, wherein the first transceiver handles traffic; and
at least one auxiliary transceiver, wherein the at least one auxiliary transceiver controls the operations associated with at least one of page scan [[and/or]] and inquiry scan;

wherein the first and auxiliary transceivers are arranged such that the first and auxiliary transceivers appear to nodes communicating with them as a single network access point, with the first and auxiliary transceivers having the same Bluetooth device address (BD_ADDR).

2. (original) The Bluetooth network access point of claim 1, wherein two auxiliary transceivers are used, the first auxiliary transceiver scans for inquiry messages which are used to discover neighboring nodes and the second auxiliary transceiver scans for page messages from neighboring nodes.

3. (original) The Bluetooth network access point of claim 1, wherein the first and auxiliary transceivers communicate with nodes using a frequency hopping communication scheme.

4. (canceled)

5. (original) The Bluetooth network access point of claim 2, wherein the first auxiliary transceiver responds to inquiry messages using inquiry response messages, and

wherein the second auxiliary transceiver establishes a connection with neighbor nodes.

6. (original) The Bluetooth network access point of claim 2, wherein after the second auxiliary transceiver establishes a connection with a neighbor node, the first transceiver communicates traffic information with the neighbor node.

7. (original) The Bluetooth network access point of claim 1, wherein the network access point is connected to a fixed infrastructure network.

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8. (canceled)

9. (original) The Bluetooth network access point of claim 1, wherein the first transceiver and at least one auxiliary transceiver are synchronized by the same clock.

10. (currently amended) In a network, a method for establishing a traffic channel between a network access point and a node, the method comprising the steps of:
scanning for inquiry messages by a first transceiver of the network access point;

receiving an inquiry message by the first transceiver from the node; and
establishing a connection between the network access point and the node,
wherein after the connection is established the node communicates traffic with a second transceiver of the network access point, and

wherein the first and second transceivers are arranged such that the first and second transceivers appear to nodes communicating with them as a single network access point.

11. (original) The method of claim 10, further comprising the steps of: receiving a page message from the neighbor node by the first transceiver; and
responding to the page message by the first transceiver, wherein the node initially establishes the connection with the first transceiver of the network access point.

12. (original) The method of claim 10, further comprising the steps of:
receiving a page message from the neighbor node by a third transceiver of the network access point; and

responding to the page message by the third transceiver, wherein the node initially establishes the connection with the third transceiver of the network access point.

13. (original) The method of claim 10, wherein the network access point and the node communicate using a frequency hopping scheme.

14. (original) The method of claim 13, wherein the network access point and the node communicate in accordance with Bluetooth protocol.

15. (original) The method of claim 10, wherein the network access point is connected to a fixed infrastructure network.

16. (currently amended) A method for establishing a traffic channel between a Bluetooth network access point and a node, comprising the steps of:

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scanning for inquiry messages by a first transceiver;
receiving an inquiry message by the first transceiver from the node;
establishing a connection with the node by performing page scans by a second transceiver; and
transferring the established connection to a third transceiver for communicating traffic;

wherein the first, second, and third transceivers are arranged such that the first, second, and third transceivers appear to nodes communicating with them as a single network access point, with the first, second, and third transceivers having the same Bluetooth device address (BD_ADDR).

17. (canceled)

18. (original) The method of claim 16, wherein the first, second and third transceivers are synchronized by the same clock.

19. (currently amended) The method of claim 16, wherein at least one additional transceiver is used to aid at least one of the first [[and/or]] transceiver and the second transceiver.

20. (original) The method of claim 16, wherein the Bluetooth network access point is connected to a fixed infrastructure.

21. (new) The Bluetooth network access point of claim 2, wherein the second auxiliary transceiver establishes a connection with a neighbor node and internally hands over the established connection to the first transceiver.

22. (new) The method of claim 11, further comprising the step of internally handing over the established connection from the first transceiver to the second transceiver.

23. (new) The method of claim 16, wherein the step of transferring the established connection comprises internally handing over the established connection from the second transceiver to the third transceiver.